In the Claims:

1. (Currently Amended) An electrochemical cell, which comprises:

a) a casing of titanium comprising ~~a casing outer layer on the~~ an interior surface layer ~~of the cell~~ consisting essentially of titanium oxide;

b) a first electrode;

c) a second, counter electrode comprising a titanium current collector provided with an outer layer consisting essentially of titanium oxide having a thickness from about 135 nm to about 240 nm contacted by an electrode active material;

d) a separator position intermediate the first and second electrodes to prevent direct physical contact between them; and

e) an electrolyte activating the first electrode in electrical association with the second electrode housed in the casing.

2. (Original) The electrochemical cell of claim 1 wherein the titanium current collector is either a screen or a foil.

3. (Cancelled)

4. (Previously Presented) The electrochemical cell of claim 1 wherein the electrode active material is selected from the group consisting of silver vanadium oxide, copper silver vanadium oxide, copper vanadium oxide, manganese dioxide, cobalt oxide, nickel oxide, copper oxide, titanium disulfide, copper sulfide, iron sulfide, iron disulfide, carbon, fluorinated carbon, and

mixtures thereof.

5. (Previously Presented) The electrochemical cell of claim 1 wherein the electrode active material is selected from the group consisting of a carbonaceous material, a metal, a metal oxide, a mixed metal oxide, a metal sulfide, and mixtures thereof.

6. (Previously Presented) The electrochemical cell of claim 1 wherein the electrode active material further comprises at least one of a binder material and a conductive additive.

7. (Original) The electrochemical cell of claim 6 wherein the binder material is selected from the group consisting of polytetrafluoroethylene, polyvinylidene fluoride, polyethylenetetrafluoroethylene, polyamides, polyimides, and mixtures thereof.

8. (Original) The electrochemical cell of claim 6 wherein the conductive additive is selected from the group consisting of carbon, graphite powder, acetylene black, titanium powder, aluminum powder, nickel powder, stainless steel powder, and mixtures thereof.

9. to 16. (Cancelled)

17. (Withdrawn and Currently Amended) The electrochemical cell of claim ~~10~~ 67 wherein the titanium current collector is either a screen or a foil.

18. (Cancelled)

19. (Withdrawn and Currently Amended) The electrochemical cell of claim ~~10~~ 67 wherein the cathode active material is selected from the group consisting of silver vanadium oxide, copper silver vanadium oxide, copper vanadium oxide, manganese dioxide, cobalt oxide, nickel oxide, copper oxide, titanium disulfide, copper sulfide, iron sulfide, iron disulfide, carbon, fluorinated carbon, and mixtures thereof.

20. to 26. (Cancelled)

27. (Previously Presented) A method for constructing an electrochemical cell, comprising the steps of:

a) providing a first electrode;

b) providing a second, counter electrode, comprising the steps of:

i) providing a titanium current collector;

ii) oxidizing the titanium current collector in an electrolytic bath at an applied voltage of about 3 volts to about 30 volts to provide it with an outer layer consisting essentially of titanium oxide having a thickness from about 135 nm to about 240 nm; and

iii) contacting the thusly conditioned titanium current collector with an electrode active material to provide the second electrode;

c) positioning a separator intermediate the first and second electrodes to prevent direct physical contact between them; and

d) activating the first and second electrodes housed inside a casing with an electrolyte.

28. (Previously Presented) The method of claim 27 including providing the titanium current collector being either a screen or a foil.

29. (Cancelled)

30. (Previously Presented) The method of claim 33 including oxidizing the titanium current collector in air.

31. (Previously Presented) The method of claim 27 including selecting the electrode active material from the group consisting of silver vanadium oxide, copper silver vanadium oxide, copper vanadium oxide, manganese dioxide, cobalt oxide, nickel oxide, copper oxide, titanium disulfide, copper sulfide, iron sulfide, iron disulfide, carbon, fluorinated carbon, and mixtures thereof.

32. (Previously Presented) The method of claim 27 including mixing the electrode active material with at least one of a binder material and a conductive additive prior to contact with the current collector.

33. to 37. (Cancelled)

38. (Currently Amended) The method of claim ~~33~~ 68 including oxidizing the titanium current collector by heating it in air at a temperature of from about 200°C to about 450°C.

39. (Previously Presented) The method of claim 38 including heating the titanium current collector for a period of time ranging from about 5 minutes to about 24 hours.

40. (Currently Amended) The method of claim ~~33~~ 68 including oxidizing the titanium current collector by heating it in air at a temperature of about 300°C for about 30 minutes.

41. (Cancelled)

42. (Previously Presented) The method of claim 27 including subjecting the titanium current collector to the applied voltage for a time period ranging from about 0.5 second to about 60 seconds.

43. (Currently Amended) An electrochemical cell, which comprises:

a) a casing of titanium comprising ~~a casing outer layer on the~~ an interior surface layer ~~of the cell~~ consisting essentially of titanium oxide;

b) an anode;

c) a cathode comprising a titanium current collector provided with an outer layer consisting essentially of titanium oxide having a thickness from about 135 nm to about 240 nm contacted by fluorinated carbon;

d) a separator position intermediate the anode and cathode to prevent direct physical contact between them; and

e) an electrolyte activating the anode in electrical association with the cathode housed in the casing.

44. (Previously Presented) The electrochemical cell of claim 43 wherein the titanium current collector is either a screen or a foil.

45. and 46. (Cancelled)

47. (Withdrawn and Previously Presented) The electrode of claim 56 wherein the titanium current collector is either a screen or a foil.

48. and 49. (Cancelled)

50. (Previously Presented) A method for constructing an electrochemical cell, comprising the steps of:

a) providing an anode;

b) providing a cathode, comprising the steps of:

i) providing a titanium current collector;

ii) oxidizing the titanium current collector in an electrolytic bath at an applied voltage of about 3 volts to about 30 volts for a time period ranging from about 0.5 second to about 60 seconds to provide it with an outer layer consisting essentially of titanium oxide having a thickness from about 135 nm to about 240 nm; and

iii) contacting the thusly conditioned titanium current collector with fluorinated carbon as a cathode active material to provide the cathode;

c) positioning a separator intermediate the anode and cathode to prevent direct physical contact between them; and

d) activating the anode and cathode housed inside a casing with an electrolyte.

51. (Previously Presented) The method of claim 50 including providing the titanium current collector being either a screen or a foil.

52. (Cancelled)

53. (Previously Presented) The method of claim 57 including oxidizing the titanium current collector by heating it in air at a temperature of from about 200°C to about 450°C for a period of time ranging from about 5 minutes to about 24 hours.

54. (Previously Presented) The method of claim 57 including oxidizing the titanium current collector by heating it in air at a temperature of about 300°C for about 30 minutes.

55. (Cancelled)

56. (Previously Presented) An electrochemical cell, which comprises:

a) a casing of titanium comprising an outer layer inside the casing consisting essentially of titanium oxide;
b) a first electrode;
c) a second, counter electrode comprising a titanium current collector provided with an outer layer consisting essentially of titanium oxide contacted by an electrode active material;
d) a separator position intermediate the first and second electrodes to prevent direct physical contact between them;
e) an electrolyte activating the first electrode in electrical association with the second electrode housed in the casing; and
f) wherein the first electrode is electrically contacted to the titanium oxide on the inside of the casing serving as its terminal and the second electrode is

electrically connected to a counter terminal electrically isolated from the casing.

57. (Currently Amended) A method for constructing an electrochemical cell, comprising the steps of:

a) providing a first electrode;

b) providing a second, counter electrode, comprising the steps of:

i) providing a titanium current collector;

ii) oxidizing the titanium current collector by heating it in air at a temperature of from about 200°C to about 450°C to provide the current collector with an outer layer consisting essentially of titanium oxide; and

iii) contacting the thusly conditioned titanium current collector with an electrode active material to provide the second electrode;

c) positioning a separator intermediate the first and second electrodes to prevent direct physical contact between them;

d) providing a casing of titanium comprising ~~a casing outer layer on the~~ an interior surface layer ~~of the cell~~ consisting essentially of titanium oxide; and

e) activating the first and second electrodes housed inside the casing with an electrolyte.

58. (Currently Amended) A method for constructing an electrochemical cell, comprising the steps of:

a) providing a first electrode;

b) providing a second, counter electrode, comprising the steps of:

i) providing a titanium current collector;

ii) oxidizing the titanium current collector by heating it in air at a temperature of about 300°C for about 30 minutes to provide the current collector with an outer layer consisting essentially of titanium oxide; and

iii) contacting the thusly conditioned titanium current collector with an electrode active material to provide the second electrode;

c) positioning a separator intermediate the first and second electrodes to prevent direct physical contact between them;

d) providing a casing of titanium comprising ~~a casing outer layer on the~~ an interior surface layer ~~of the cell~~ consisting essentially of titanium oxide; and

e) activating the first and second electrodes housed inside the casing with an electrolyte.

59. (Previously Presented) A method for constructing an electrochemical cell, comprising the steps of:

a) providing a first electrode;

b) providing a second, counter electrode, comprising the steps of:

i) providing a titanium current collector;

ii) oxidizing the titanium current collector in an electrolytic bath at an applied voltage of about 3

volts to about 30 volts to provide it with an outer layer consisting essentially of titanium oxide; and

iii) contacting the thusly conditioned titanium current collector with an electrode active material to provide the second electrode;

c) positioning a separator intermediate the first and second electrodes to prevent direct physical contact between them; and

d) activating the first and second electrodes housed inside a casing with an electrolyte.

60. (Previously Presented) The method of claim 59 including subjecting the titanium current collector to the applied voltage for a time period ranging from about 0.5 second to about 60 seconds.

61. (Previously Presented) The electrochemical cell of claim 1 wherein the titanium oxide on the outer casing layer has a thickness from about 135 nm to about 240 nm.

62. (Currently Amended) The electrochemical cell of claim ~~10~~ 67 wherein the titanium oxide on the outer casing layer has a thickness from about 135 nm to about 240 nm.

63. (Currently Amended) The method of claim ~~33~~ 68 including providing the titanium oxide on the outer casing layer having a thickness from about 135 nm to about 240 nm.

64. (Previously Presented) The electrochemical cell of claim 43 wherein the titanium oxide on the outer casing layer has a thickness from about 135 nm to about 240 nm.

65. (Previously Presented) The method of claim 57 including providing the titanium oxide on the outer casing layer having a thickness from about 135 nm to about 240 nm.

66. (Previously Presented) The method of claim 58 including providing the titanium oxide on the outer casing layer having a thickness from about 135 nm to about 240 nm.

67. (New) An electrochemical cell, which comprises:

a) a casing of titanium comprising an interior surface layer consisting essentially of titanium oxide;

b) an anode;

c) a cathode comprising a cathode active material contacted to a titanium current collector, wherein the titanium current collector is provided with an outer layer consisting essentially of titanium oxide having a thickness from about 135 nm to about 240 nm in contact with the cathode active material; and

d) an electrolyte activating the anode in electrical association with the cathode housed in the casing.

68. (New) A method for constructing an electrochemical cell, comprising the steps of:

a) providing an anode;

b) providing a cathode, comprising the steps of:

i) providing a titanium current collector;

ii) subjecting the titanium current collector either to oxidation at an elevated temperature in an oxygen-containing environment or to an electrolytic bath at an applied voltage of about 3 volts to about 30 volts to thereby provide the titanium current collector with an outer layer consisting essentially of titanium oxide; and

iii) contacting the thusly conditioned titanium current collector with a cathode active material to provide the cathode; and

c) positioning a separator intermediate the anode and cathode to prevent direct physical contact between them;

d) providing a casing of titanium comprising an interior surface layer consisting essentially of titanium oxide; and

e) activating the anode and cathode housed inside the casing with an electrolyte.

69. (New) The method of claim 68 wherein the elevated temperature is at least about 200°C for at least about 5 minutes.

70. (New) The method of claim 68 wherein the titanium oxide layer has a thickness from about 135 nm to about 240 nm.

71. (New) The method of claim 68 wherein the titanium oxide is characterized as having been provided by subjecting the titanium current collector to the electrolytic bath of oxalic acid at the applied voltage for a time period ranging from about 0.5 seconds to about 60 seconds.